



HEDGEYE'S CURRENT MARKET OUTLOOK

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CURRENT OUTLOOK

Q1 2019 MACRO THEMES

1

QUAD 4, THEN QUAD 3

Amid the carnage associated with Quad 4 In Q4, buy-side consensus remained hopeful that popular longs (read: “secular growers”) were presenting investors with generational buying opportunities in key names. On the contrary, our model continues to signal the next economic phase transition is unlikely to rotate back to the Quad 1/2 environment that supported those positions, but rather to a more stagflationary environment that is typically characterized by multiple compression and the outperformance of inflation hedges. In the presentation, we’ll detail the aforementioned transition, as well as how it is likely to impact asset markets in both relative and absolute performance terms.

2

EARNINGS VS. CREDIT CYCLE

What are credit markets signaling (e.g. new YTD wides in OAS for both IG and HY) that the equity market has not over the past few trading days of December? Simply put, we think the former market is sniffing out an ongoing deterioration of the outlook for corporate profits. In the presentation, we’ll detail each of the key risk factors driving corporate profits lower over the NTM. The risk of a corporate profit recession – as shallow as it may be – is not immaterial.

3

LONG IDEAS: HOUSING, GOLD, ETC.

Implicit in our multi-quarter Quad 4 view is an expectation for a more discrete dovish pivot out of the Federal Reserve, which may lead to a further decline in interest rates and an eventual cessation of trending US dollar strength. In the presentation, we’ll detail the likely impact of that catalyst – namely continued outperformance of gold/gold miners, as well as the homebuilders. EM may start to signal a bottom in that scenario as well.

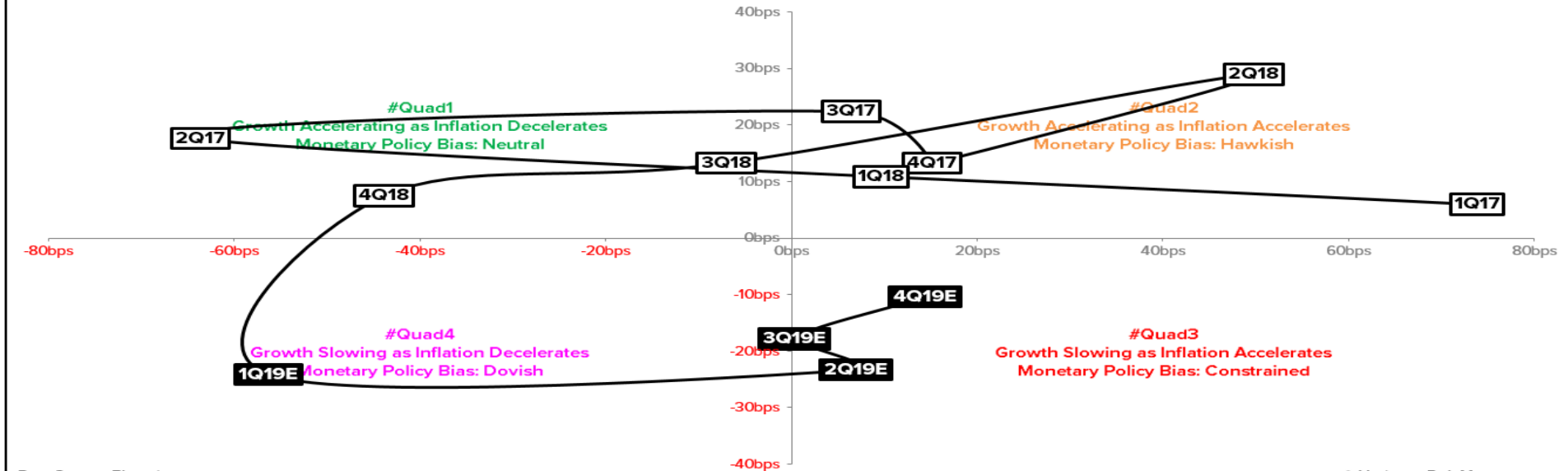
U.S. GIP MODEL (OUR PROCESS IS REPEATABLE)

BOTH DALIO'S RESEARCH AND OUR OWN FINDINGS HAVE PROVEN THAT THE TWO MOST IMPORTANT FACTORS FOR INVESTORS TO SOLVE FOR ARE THE MARGINAL RATES OF CHANGE IN GROWTH AND INFLATION, AS POLICYMAKERS TYPICALLY RESPOND TO SUBSEQUENT LEVELS ON A LAG.

United States	1Q16	2Q16	3Q16	4Q16	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18	4Q18	← Actuals Estimates →	1Q19E	2Q19E	3Q19E	4Q19E
Real GDP QoQ SAAR	1.50%	2.30%	1.90%	1.80%	1.80%	3.00%	2.80%	2.30%	2.20%	4.20%	3.40%	2.56%	Hedgeye Estimates	1.26%	3.18%	2.61%	2.15%
YoY Hurdle Rate	3.30%	3.30%	1.00%	0.40%	1.50%	2.30%	1.90%	1.80%	1.80%	3.00%	2.80%	2.30%	YoY Hurdle Rate	2.20%	4.20%	3.40%	2.60%
Real GDP YoY	1.56%	1.30%	1.54%	1.88%	1.94%	2.11%	2.34%	2.47%	2.58%	2.87%	3.00%	3.08%	Hedgeye Estimates	2.84%	2.60%	2.43%	2.32%
2Y Comparative Base Effect	2.63%	2.99%	2.71%	2.35%	2.68%	2.33%	1.96%	1.94%	1.75%	1.71%	1.94%	2.18%	2Y Comparative Base Effect	2.26%	2.49%	2.67%	2.77%
Headline CPI YoY	1.08%	1.05%	1.12%	1.80%	2.54%	1.90%	1.97%	2.12%	2.21%	2.71%	2.64%	2.20%	Headline CPI YoY	1.64%	1.71%	1.71%	1.86%
2Y Comparative Base Effect	0.67%	1.01%	0.95%	0.86%	0.51%	0.50%	0.61%	1.13%	1.81%	1.48%	1.54%	1.96%	2Y Comparative Base Effect	2.38%	2.31%	2.30%	2.16%

United States

◆ x-axis: Second Derivative of YoY Headline CPI;
y-axis: Second Derivative of YoY Real GDP



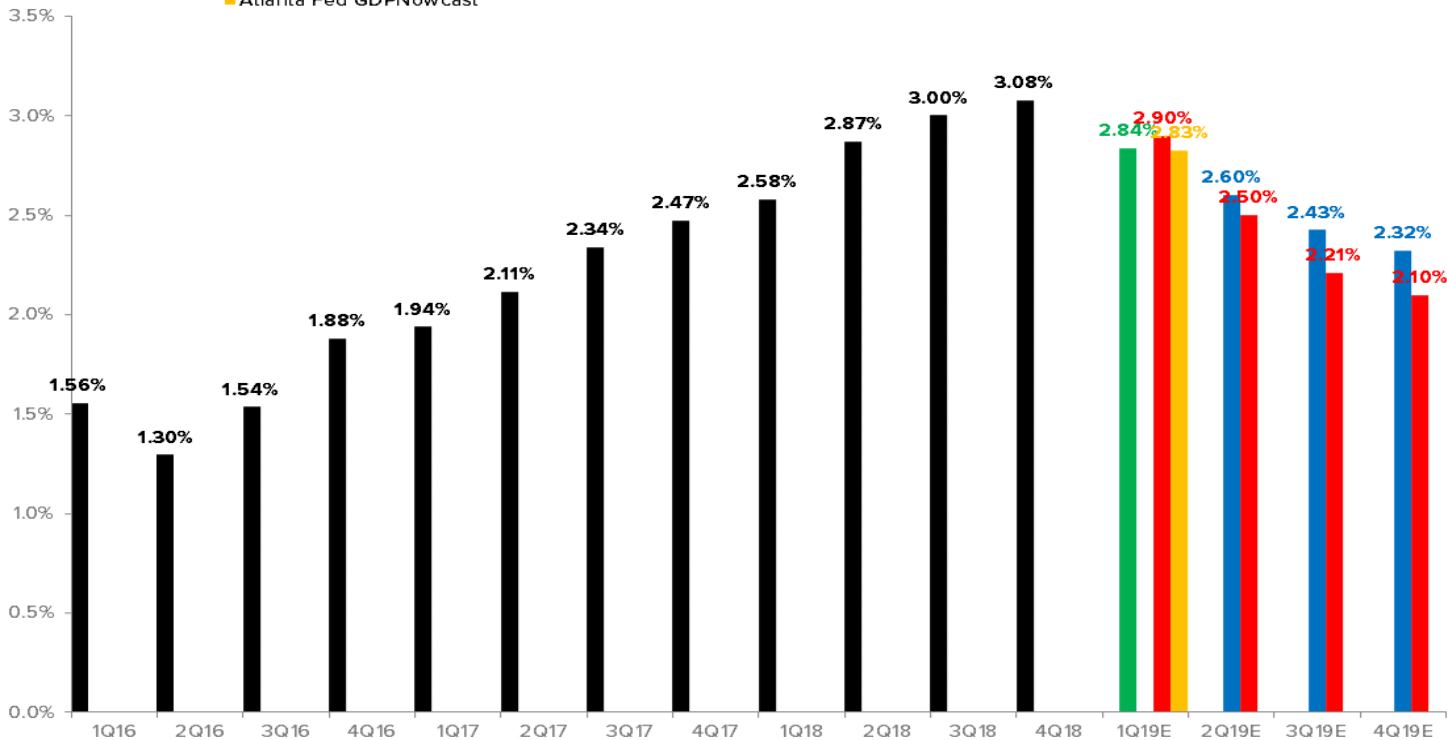
Data Source: Bloomberg

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U.S. REAL GDP FORECASTS

United States

- Real GDP YoY
- Hedgeye Estimates - Nowcast Model
- Hedgeye Estimates - Comparative Base Effect Model
- Bloomberg Consensus Estimates
- Atlanta Fed GDPNowcast



Data Source: Bloomberg

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We use two distinct models to forecast the YoY growth rate of real GDP and the combination of the two allows us to develop both a highly accurate real-time view of near-term growth momentum, as well as a high-probability scenario for where growth is likely to trend over the intermediate term.

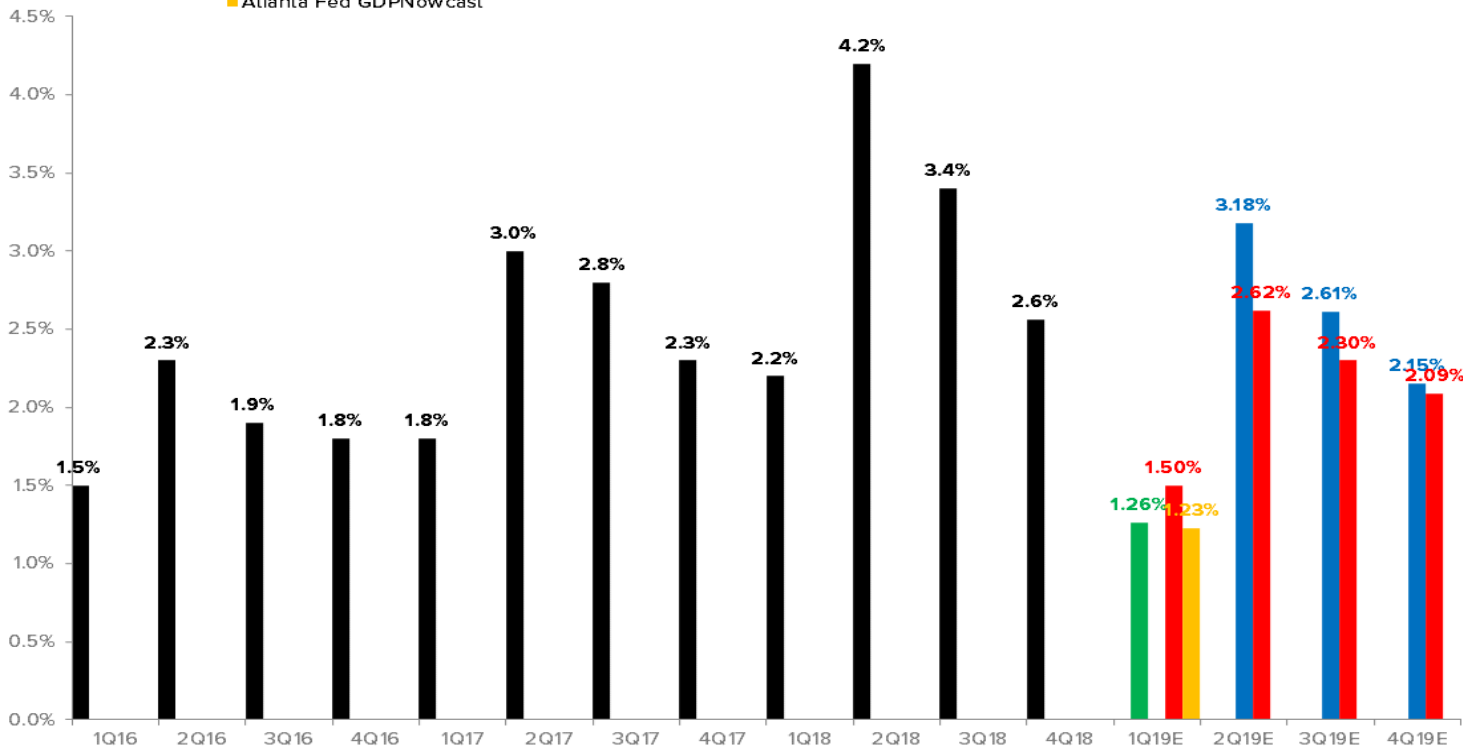
Intra-quarter, we employ a stochastic nowcasting framework that adjusts the base rate by the cumulative weighted marginal rate of change of the 30 factors embedded in our predictive tracking algorithm. In out-quarters where high-frequency data has yet to be reported, we employ a Bayesian inference process that adjusts each of the preceding forecasted base rates inversely and proportionally to the marginal rates of change in the base effects. The 2Y average growth rate in the comparative base period backtests as having the most forecasting validity.

All in, our U.S. GDP model has an intra-quarter tracking error of 33bps, an average absolute forecast error of 23bps and an r-squared of 0.87 with a success rate of 88% in terms of projecting the directional outcome.

U.S. HEADLINE GDP FORECASTS

United States

- Real GDP QoQ SAAR
- Hedgeye Estimates - Nowcast Model
- Hedgeye Estimates - Comparative Base Effect Model
- Bloomberg Consensus Estimates
- Atlanta Fed GDPNowcast



Data Source: Bloomberg

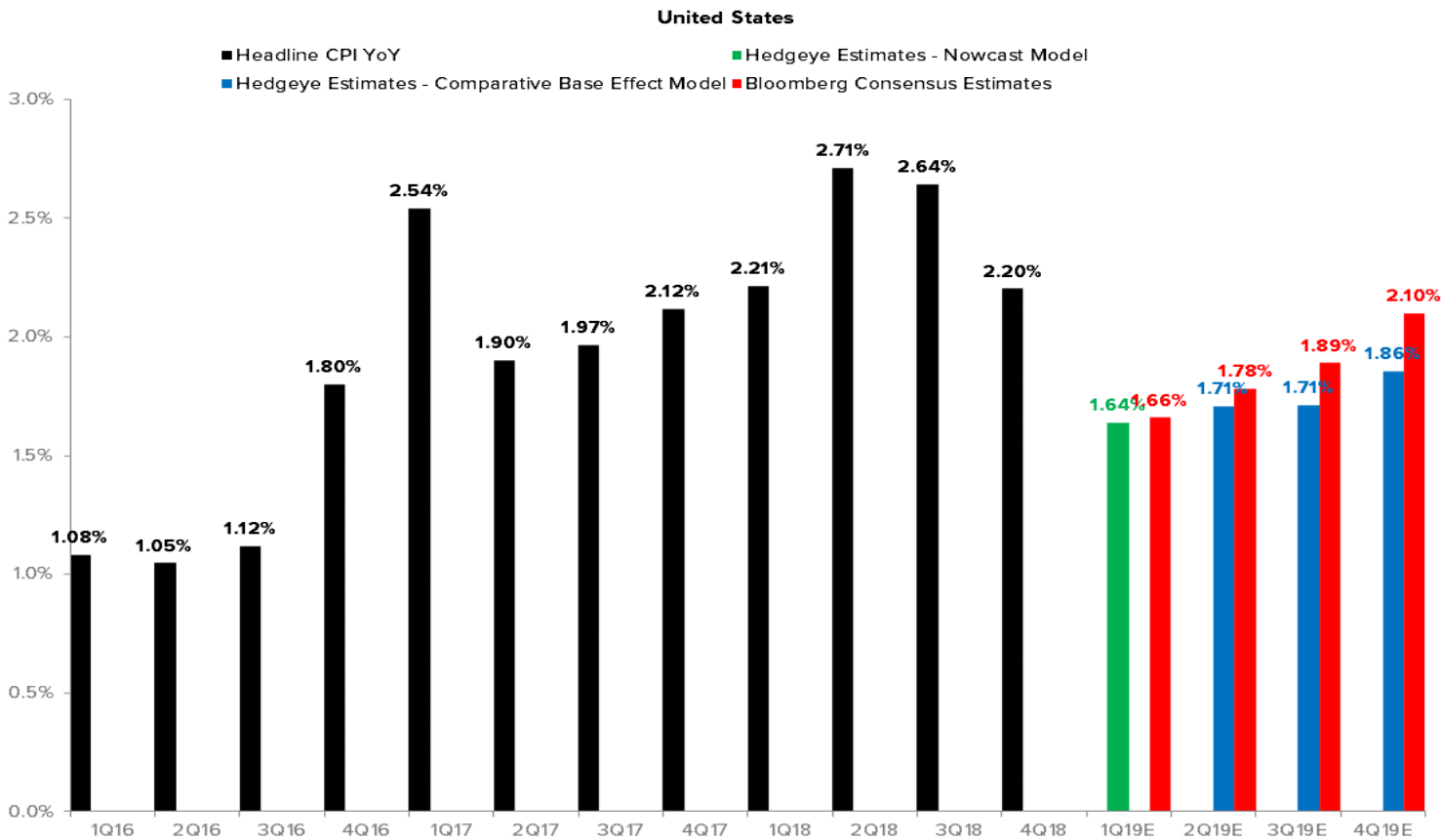
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One differentiating factor of our forecasting process is that we aim to solve for cycle (i.e. where growth is trending to on a YoY basis), rather than trying to identify super short-term economic momentum. A rigorous study of financial market history suggests the latter growth rate to be little more than noise in the context of making accurate intermediate-to-long-term investment decisions.

As such, we interpolate our QoQ SAAR forecasts from what is being implied by our forecasted YoY growth rate.

For discussion's sake, we typically backfill a supporting narrative on why our model suggests growth is likely to come in higher or lower than consensus estimates by highlighting recent economic developments that we view as having a high probability of continuing based on our analysis of the distinct cycles throughout the various sectors of the economy, keeping in mind that we're discussing a residual value, not the underlying driver of cross-asset returns.

U.S. HEADLINE CPI FORECASTS



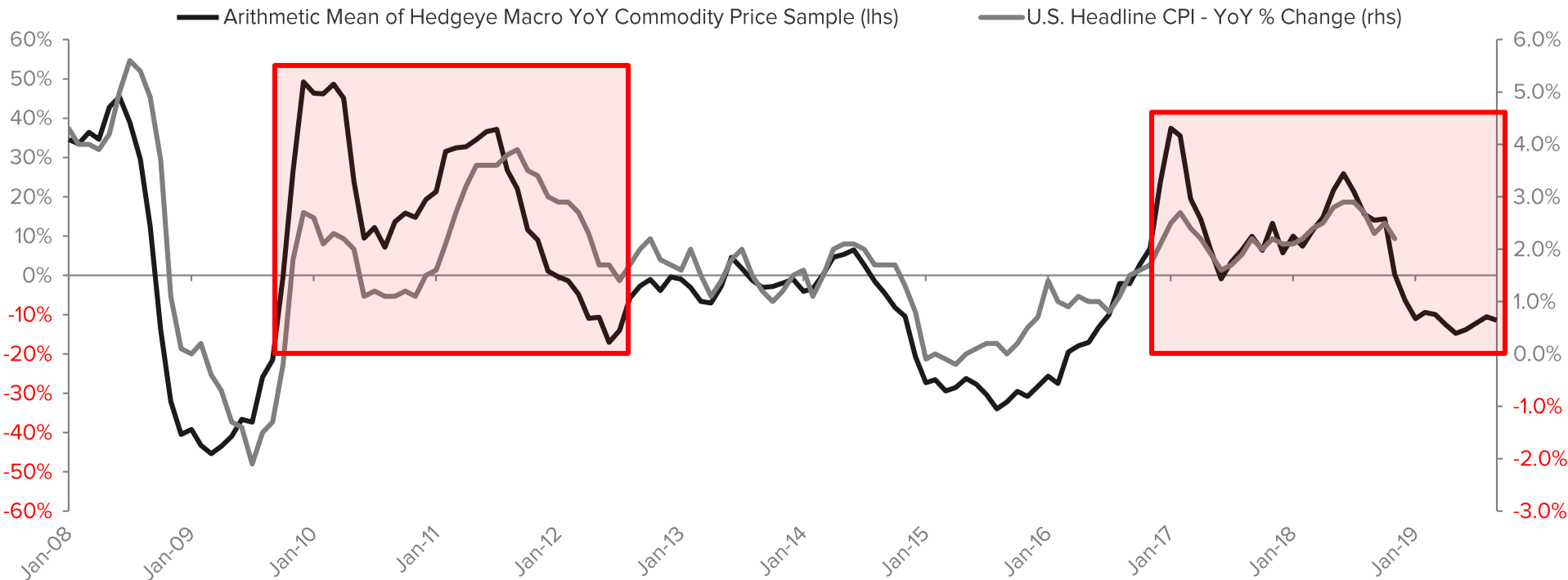
We use two distinct models to forecast the YoY rate of change in headline CPI and the combination of the two allows us to develop both a highly accurate real-time view of near-term inflation momentum, as well as a high-probability scenario for where inflation is likely to trend over the intermediate term.

Intra-quarter, we employ a stochastic nowcasting framework that adjusts the base rate by the cumulative weighted marginal rate of change of the various inflation-oriented factors embedded in our predictive tracking algorithm. In out-quarters where high-frequency data has yet to be reported, we employ a Bayesian inference process that adjusts each of the preceding forecasted base rates inversely and proportionally to the marginal rates of change in the base effects. The 2Y average growth rate in the comparative base period backtests as having the most forecasting validity.

All in, our U.S. CPI model has an intra-quarter tracking error of 33bps, an average absolute forecast error of 21bps and an r-squared of 0.79 with a success rate of 88% in terms of projecting the directional outcome.

U.S. HEADLINE CPI LEADING INDICATOR

STRUCTURAL SHIFTS IN THE ECONOMY HAVE INCREASINGLY MITIGATED THE RISK OF A WAGE/PRICE SPIRAL, LEADING TO AN INCREASED SENSITIVITY OF HEADLINE CPI TO ANNUAL FLUCTUATIONS IN TRADEABLE GOODS PRICES – A DYNAMIC OUR MODEL HAS ASTUTELY CAPITALIZED ON.



The Hedgeye Macro commodity price sample includes the CRB Index, CRB Raw Industrials Index, Brent Crude Oil and the UN Food and Agriculture Price Index. YoY deltas are calculated from monthly averages. Forward estimates assume no change to current monthly averages.

OUR MACRO PROCESS

OUR RISK MANAGEMENT OVERLAY IS RULES-BASED

#QUAD1

- **Maximum gross exposure, tight net exposure. Growth investing bias.**
- **Asset Class Overweight(s):**
Equities and Credit
- **Asset Class Underweight(s):**
Fixed Income
- **Equity Sector Overweight(s):**
Tech, Consumer Discretionary and Industrials
- **Equity Sector Underweight(s):**
Utilities, Consumer Staples and Energy
- **Equity Style Factor Overweight(s):** Momentum, Growth and High Beta
- **Equity Style Factor Underweight(s):**
Low Beta/Minimum Vol., High Dividend Yield and Value
- **Fixed Income Overweight(s):**
Convertibles, HY Credit, HY Munis and Leveraged Loans
- **Fixed Income Underweight(s):**
Short Duration Treasuries, TIPS and MBS

#QUAD2

- **Maximum gross exposure, wide net exposure. Inflation-hedging bias.**
- **Asset Class Overweight(s):**
Equities and Credit
- **Asset Class Underweight(s):**
Fixed Income
- **Equity Sector Overweight(s):**
Tech, Industrials and Consumer Discretionary
- **Equity Sector Underweights(s):**
Utilities, REITS and Consumer Staples
- **Equity Style Factor Overweight(s):** Momentum, Growth and High Beta
- **Equity Style Factor Underweight(s):**
Low Beta/Minimum Vol., High Dividend Yield and Value
- **Fixed Income Overweight(s):**
Convertibles, Leveraged Loans TIPS, HY Credit and IG Credit
- **Fixed Income Underweight(s):**
Long Duration Treasuries and Munis

#QUAD3

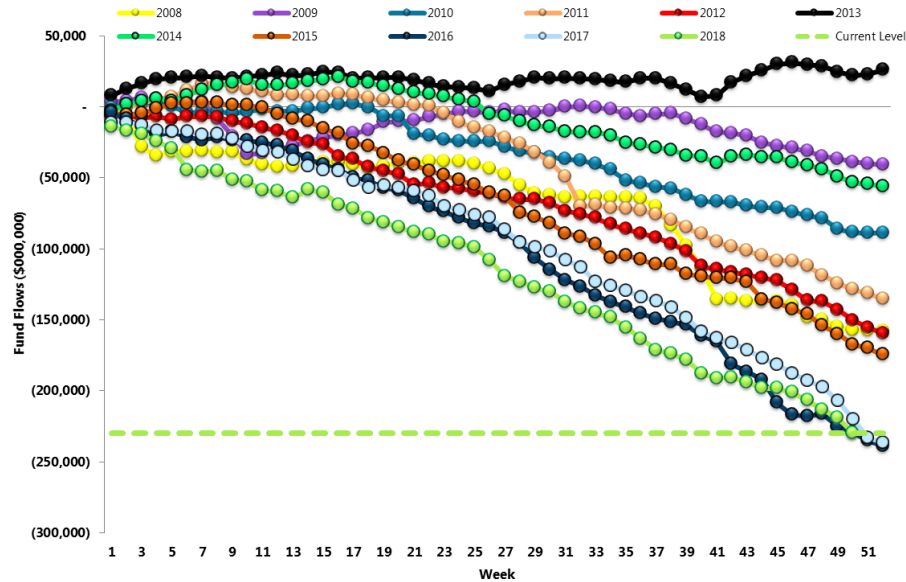
- **Low gross exposures, tight net exposure. Defensive, yield-chasing bias.**
- **Asset Class Overweight(s):**
Fixed Income
- **Asset Class Underweight(s):**
Equities and Credit
- **Equity Sector Overweight(s):**
Utilities, REITS and Energy
- **Equity Sector Underweight(s):**
Financials, Materials and Consumer Staples
- **Equity Style Factor Overweight(s):**
Low Beta/Minimum Vol., Growth and Quality
- **Equity Style Factor Underweight(s):**
Value, High Dividend Yield and Small Caps
- **Fixed Income Overweight(s):**
Long Duration Treasuries, Taxable Munis and TIPS
- **Fixed Income Underweight(s):**
HY Credit, Leveraged Loans, IG Credit and Convertibles

#QUAD4

- **Minimum gross exposure, net short exposure. Deflation-hedging bias.**
- **Asset Class Overweight(s):**
Fixed Income
- **Asset Class Underweight(s):**
Equities and Credit
- **Equity Sector Overweight(s):**
Healthcare, Consumer Staples and REITS
- **Equity Sector Underweight(s):**
Tech, Energy and Industrials
- **Equity Style Factor Overweight(s):**
High Dividend Yield, Low Beta/Minimum Vol. and Quality
- **Equity Style Factor Underweight(s):**
Momentum, High Beta and Growth
- **Fixed Income Overweight(s):**
Long Duration Treasuries, MBS, IG Credit and Taxable Munis
- **Fixed Income Underweight(s):**
TIPS, HY Credit, Convertibles and Leveraged Loans

THE INVESTMENT LANDSCAPE HAS EVOLVED TREMENDOUSLY

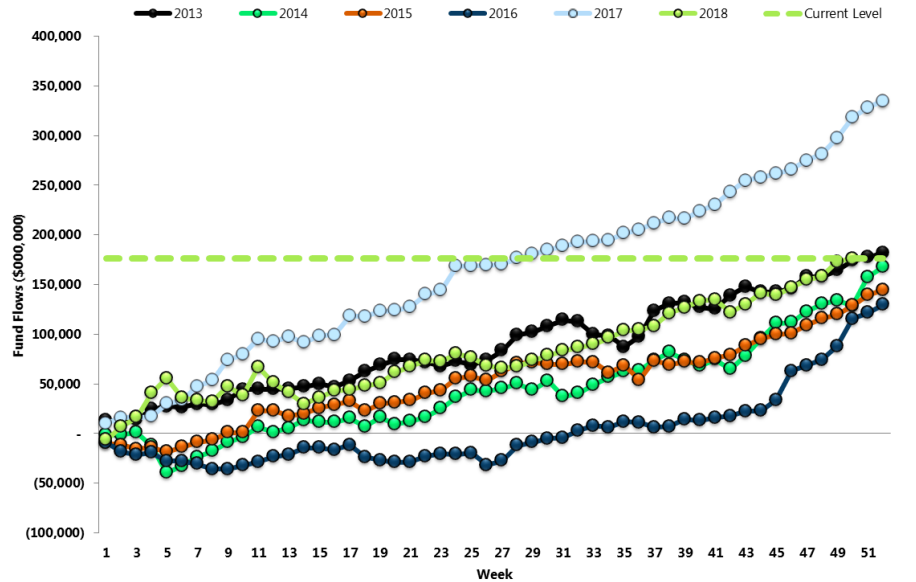
Cumulative Domestic Equity Fund Flows



Data Source: ICI

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Cumulative Equity ETF Fund Flows



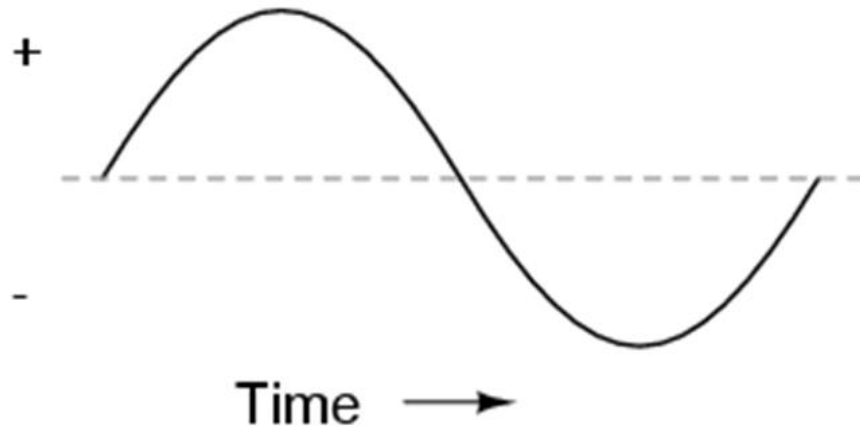
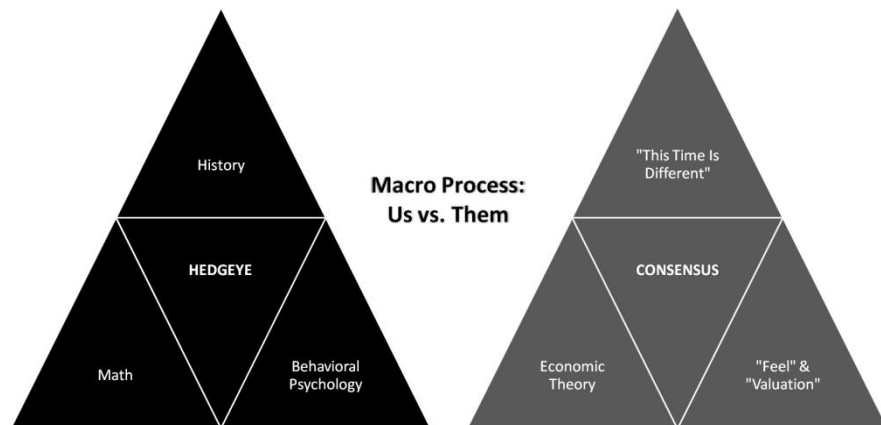
Data Source: ICI

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SKATE TO WHERE THE PUCK IS GOING IN ASSET MANAGEMENT

Assets invested in ETFs and ETPs listed globally surpassed \$5 trillion by mid-2018. Moreover, BlackRock anticipates ETF/ETP AUM to more than double to \$12 trillion over the next 5 years. Regardless of whether or not you agree with this projection, you have to agree that **the proliferation of factor-based index investing and the growth of platform-oriented, market-neutral hedge fund strategies has made financial markets more sensitive to Macro risks than ever before.** For example, JPM estimates systematic trading accounts for over 90% of U.S. equity trading volume. Are your investment processes equipped to compete for alpha in this new regime?

...SO WE EVOLVED ALONGSIDE IT



WE ARE DIFFERENTIATED FROM THE HERD

Macroeconomic Research and **Global Macro Risk Management** are two very different fields. We specialize in the latter, incorporating key lessons from behavioral finance such as Prospect Theory and Bayesian Inference into our analysis. **We don't "feel" anything with regards to the markets or the economy; if we can't contextualize it with math, we don't have a view on it.**

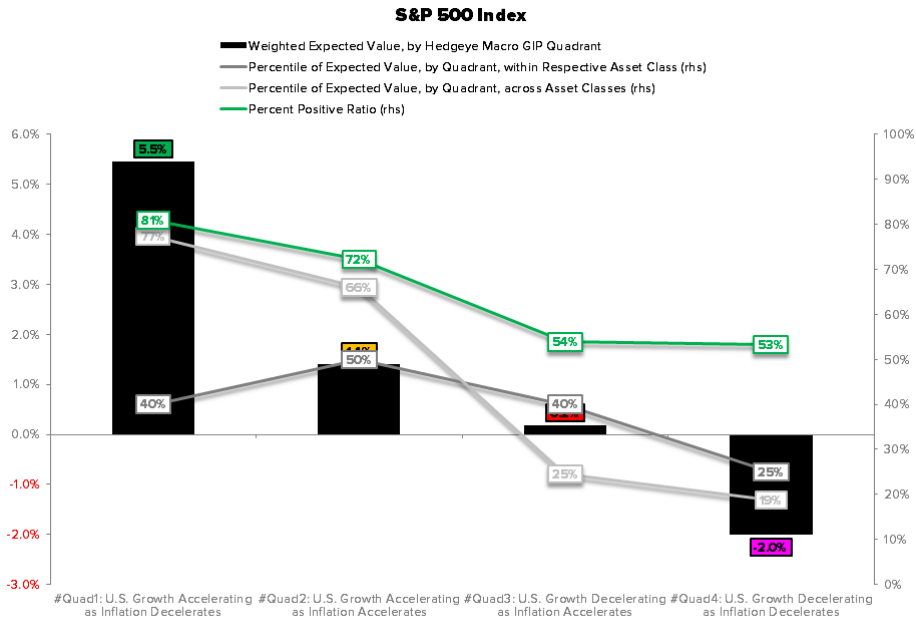
... BECAUSE WE FOCUS ON THE FACTS

Rate of change accelerations and decelerations are facts, not opinions, and our process is focused on contextualizing these facts, rather opining on the validity of **absolute levels** of growth, inflation, and/or policy. **This focus helps us consistently spot inflections in the performance of key factor exposures, across asset classes, 3-6 months ahead of investor consensus.**

WHY RATE OF CHANGE?: S&P 500 CASE STUDY

RATE OF CHANGE:

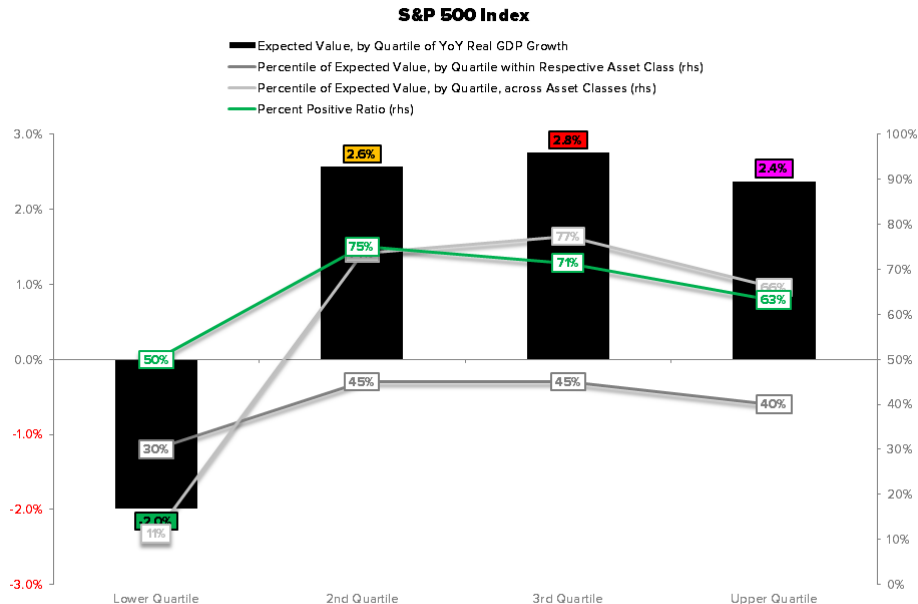
INTUITIVE, INVESTABLE DISPERSION IN THE RETURN PROFILES OF KEY MACRO FACTOR EXPOSURES ACROSS HEDGEYE GIP MODEL REGIMES



Data Source: Bloomberg. Asset classes include equities, fixed income, currencies and commodities. Trailing 20Y.

ABSOLUTE LEVELS:

LIMITED, UN-INVESTABLE DISPERSION IN THE RETURN PROFILES OF KEY MACRO FACTOR EXPOSURES ACROSS QUARTILES OF REAL GDP GROWTH



Data Source: Bloomberg. Asset classes include equities, fixed income, currencies and commodities. Trailing 20Y.

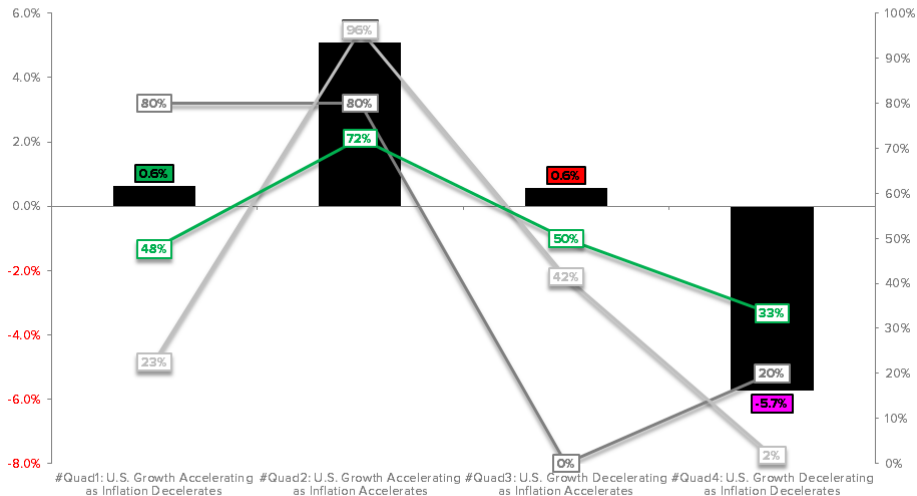
WHY RATE OF CHANGE?: 10Y UST YIELD CASE STUDY

RATE OF CHANGE:

INTUITIVE, INVESTABLE DISPERSION IN THE RETURN PROFILES OF KEY MACRO FACTOR EXPOSURES ACROSS HEDGEYE GIP MODEL REGIMES

US 10Y Treasury Yield

- Weighted Expected Value, by Hedgeye Macro GIP Quadrant
- Percentile of Expected Value, by Quadrant, within Respective Asset Class (rhs)
- Percentile of Expected Value, by Quadrant, across Asset Classes (rhs)
- Percent Positive Ratio (rhs)



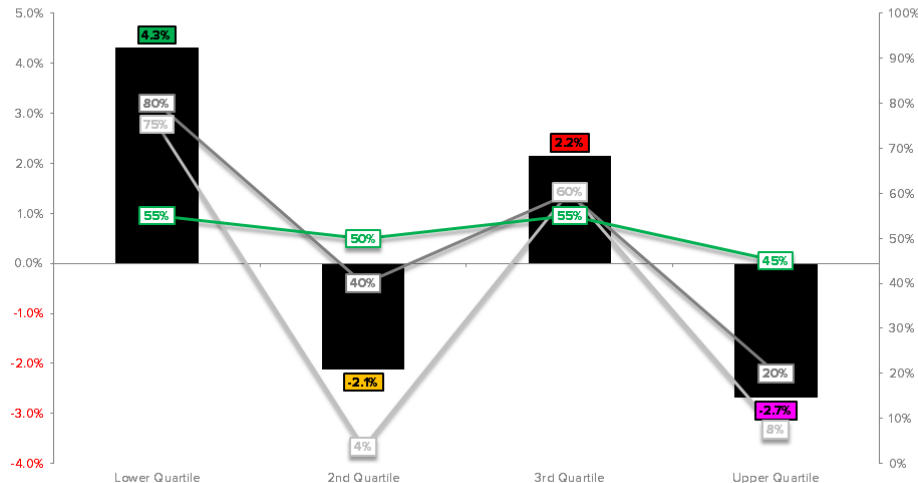
Data Source: Bloomberg. Asset classes include equities, fixed income, currencies and commodities. Trailing 20Y.

ABSOLUTE LEVELS:

INCOHERENT, UN-INVESTABLE DISPERSION IN THE RETURN PROFILES OF KEY MACRO FACTOR EXPOSURES ACROSS QUARTILES OF HEADLINE INFLATION

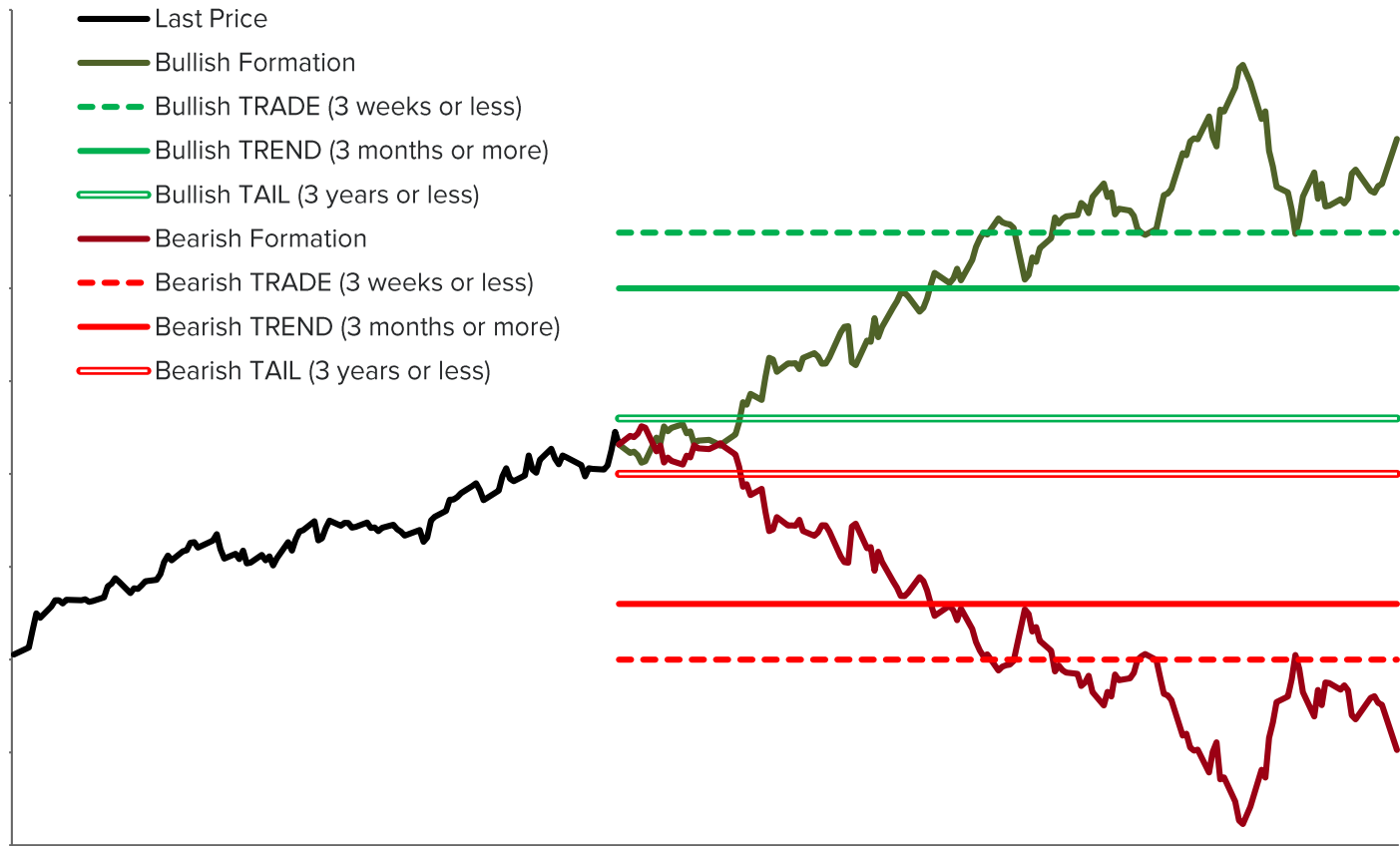
US 10Y Treasury Yield

- Expected Value, by Quartile of YoY Headline Consumer Price Inflation
- Percentile of Expected Value, by Quartile within Respective Asset Class (rhs)
- Percentile of Expected Value, by Quartile, across Asset Classes (rhs)
- Percent Positive Ratio (rhs)



Data Source: Bloomberg. Asset classes include equities, fixed income, currencies and commodities. Trailing 20Y.

TRADE/TREND/TAIL RISK MANAGEMENT PROCESS

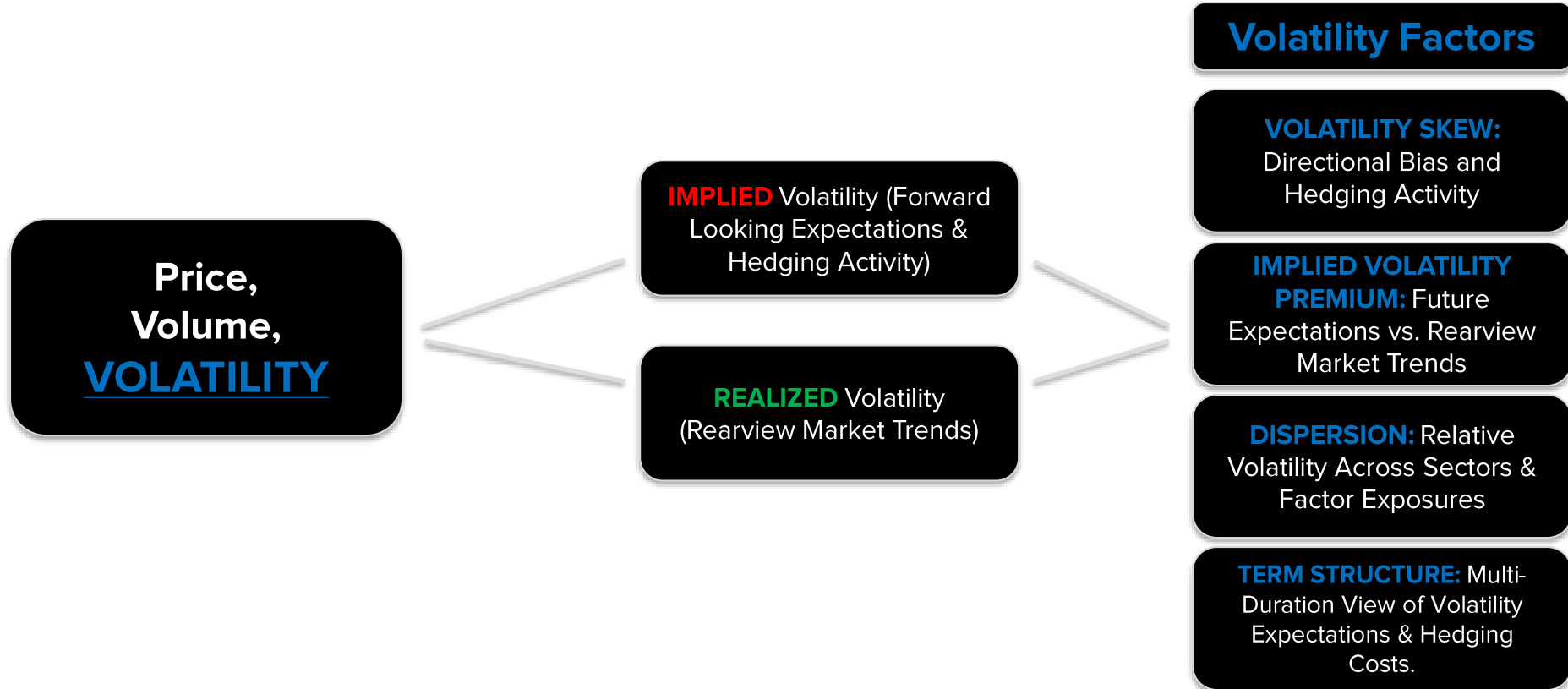


Core to the process of selecting our preferred macro factor exposures is whether or not the ticker screens well from the perspective of Keith's proprietary risk management process, which employs PRICE, VOLUME and VOLATILITY as discrete factors in the calculus of levels that backtest well as critical momentum thresholds.

Assets where last price is greater than all three (in ascending order) are said to be in a "Bullish Formation" and all dips should be bought, insomuch that assets in the converse "Bearish Formation" should be repeatedly shorted on strength.

RISK MANAGEMENT: THE VOLATILITY FACTOR

3-FACTOR MODEL: PRICE, VOLUME, VOLATILITY



FOR MORE INFORMATION CONTACT:

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